

Site Visit Report	MDSHA MS4 (General Permit No. 99-DP-3313) Dayton Maintenance Facility & Pine Orchard Satellite Facility MDSHA District No. 7	Site Visit Date: 11/20/2013
--------------------------	---	--------------------------------

Facility Name: Dayton Maintenance Facility
Location: 4401 Route 32, Dayton, MD 21036

Date of Visit: November 20, 2013
Entry Time: 8:00 a.m. (approx)
Exit Time: 11:30 a.m. (approx)

Site Owner and/or Operator: Maryland State Highway Administration (MDSHA) – District 7

Site Contact: Jim Jones (Resident Maintenance Engineer, MDSHA)

Conducted by: Bobby Jacobsen (PG Environmental, LLC), Andy Dinsmore (U.S. EPA Region 3), Rebecca Crane (U.S. EPA Region 3), and Kaitlyn Bendik (U.S. EPA Region 3)

Accompanied by¹: Eddie Funk (District Environmental Coordinator, MDSHA), Greg Keenan (ECD Chief, MDSHA), Tim Stambaugh (Assistant Resident Maintenance Engineer, MDSHA), Carlton Wyvill (Tech Manager, MDSHA), and Wayne Rippeon (Shop Chief, MDSHA)

Site Visit Report Prepared by: Bobby Jacobsen (PG Environmental, LLC)

On November 20, 2013, the EPA Inspection Team conducted a site visit at the Dayton Maintenance Facility (hereinafter, Facility) located in Howard County, Maryland. Howard County is identified as a covered county in MDSHA's Municipal Separate Storm Sewer System (MS4) Discharge Permit (No. 99-DP-3313); therefore, the requirements of the MS4 permit are applicable to the Facility. The Facility also maintained permit coverage under the Maryland Department of Environment (MDE) General Discharge Permit for Stormwater Associated with Industrial Activities (Permit No. 02-SW).

The Facility is composed of multiple buildings (e.g., office building/vehicle maintenance building, salt storage dome, and material/equipment storage buildings), a vehicle fueling island, outdoor vehicle/equipment storage areas, and a vehicle wash bay. There is an outdoor stockpile area in the southeastern portion of the Facility which is used for the storage of materials such as soil, wood chips, and asphalt millings. Various activities are conducted at or based out of the Facility, including the following: vehicle washing, storage, repair, and fueling; salt/sand/brine operations; snow removal operations; road maintenance operations; vegetation management; and drainage maintenance operations. MDSHA staff explained the Facility was renovated starting in 1999 and that most of the buildings onsite were constructed during the renovation.

The ground surface of the Facility is mostly impervious and stormwater runoff is primarily conveyed via overland flow offsite or to permanent onsite bioretention basins. There are two individual bioretention basins in the northeastern and southeastern portions of the Facility (refer to Photographs 1 and 2) and three additional bioretention basins which are connected in series in the southwestern portion of the Facility.

¹ Sign-in sheets for the site visit are provided after the photograph log.

Site Visit Report	MDSHA MS4 (General Permit No. 99-DP-3313) Dayton Maintenance Facility & Pine Orchard Satellite Facility MDSHA District No. 7	Site Visit Date: 11/20/2013
--------------------------	---	--------------------------------

Stormwater is discharged from the Facility to unnamed intermittent streams along the eastern and western boundaries of the Facility.

During the site visit, MDSHA's District Environmental Coordinator (hereinafter, DEC) for MDSHA District Nos. 6 and 7 and other Facility staff explained MDSHA's oversight activities for pollution prevention and good housekeeping at the Facility. The EPA Inspection Team accompanied the DEC and additional MDSHA staff on an inspection of the Facility to identify any current site issues and discuss the items typically observed and documented by MDSHA during its oversight activities.

The EPA Inspection Team observed the following with regard to pollution prevention and good housekeeping at the Dayton Maintenance Facility:

1. A combined stormwater pollution prevention plan (SWPPP) and spill prevention control and countermeasure plan (SPCC) for the Facility, dated June 2011 (hereinafter, SWPPP/SPCC), was maintained onsite and made available to the EPA Inspection Team for review. The SWPPP/SPCC includes a site map of the Facility. MDSHA staff explained that the DEC makes periodic handwritten changes to the SWPPP/SPCC to try to ensure the plan accurately reflects the Facility and onsite activities.
2. The DEC and Facility staff explained that two types of stormwater pollution prevention inspections are conducted at the Facility: weekly inspections conducted internally by Facility staff (typically the Tech Manager) and quarterly inspections conducted by the DEC. MDSHA staff explained that the inspections are documented with inspection checklists. The DEC explained that he takes field notes while conducting inspections and photographs to document observed issues, and then completes an electronic version of the inspection checklist in the "Facility Compliance Inspection" (FCI) system which is uploaded to MDSHA's "Regulatory Compliance System" (SHARCS). The most recent quarterly inspection conducted by the DEC occurred during the week prior to the EPA Inspection Team's site visit. The quarterly inspection prior to that occurred on August 28, 2013. The DEC stated that he visits the Facility more frequently than just for the quarterly inspection and will identify issues for correction if he sees them during those site visits. Weekly and quarterly inspection records were maintained onsite and made available for review at the time of the site visit.
3. The DEC explained that he conducts environmental compliance training, which includes a stormwater component, for MDSHA maintenance staff on an annual basis. He typically conducts training for maintenance facility staff in District 6 in the fall of each year and in early spring for District 7. Training activities are tracked in an electronic "LMS" tracking database.
4. The Facility has an indoor vehicle wash bay (refer to Photograph 3) which is connected to an oil/water separator and discharges to an underground 500-gallon holding tank which is pumped out as needed. MDSHA staff explained the oil/water separator and holding tank are inspected quarterly, and cleaned or pumped out as needed, by Maryland Environmental Services (MES). MES provides the Facility with a formal report of each inspection/cleaning event. The EPA Inspection Team viewed the inspection records from spring 2013, which were maintained onsite. The Environmental Compliance Division Chief explained that MDSHA maintains coverage under an individual National Pollutant Discharge Elimination System (NPDES) permit in the event that the Facility needed to

Site Visit Report	MDSHA MS4 (General Permit No. 99-DP-3313) Dayton Maintenance Facility & Pine Orchard Satellite Facility MDSHA District No. 7	Site Visit Date: 11/20/2013
--------------------------	---	--------------------------------

discharge from the vehicle wash bay or oil/water separator (NPDES Permit No. MD0068420; State Permit No. 07-DP-3331).

5. Facility staff explained that it has a vacuum truck which it uses for storm drain inlet cleaning. The vacuum truck must be taken to the Glen Burnie Maintenance Facility for dewatering and disposal of waste material.
6. Salt residue was present on the impervious ground surface adjacent to the salt storage dome (refer to Photographs 4 through 6). The DEC and Facility staff explained the Facility maintains about six “night trucks” which are dump trucks fitted with a plow attachment and loaded with salt each evening during the winter operation season. They explained that these trucks are loaded and unloaded each day when they may be needed in the winter so they can be dispatched from staff members’ homes rather than the Facility itself. Table 6 of the Facility SWPPP/SPCC identifies sweeping after loading and unloading activities as a non-structural best management practice (BMP) for the salt dome area. The staff explained that sweeping is conducted after use but it is difficult to ensure no salt residue or salt is beyond the salt storage dome when these operations are underway for the season. The Facility site map depicts that stormwater runoff from this area would flow overland and offsite to the east.
7. Metal materials were stored outside on an impervious ground surface upgradient of the bioretention basin in the northeastern portion of the Facility (refer to Photograph 7).
8. Evidence of erosion was observed on the slope of a soil stockpile and adjacent drainage area in the northeastern portion of the outdoor stockpile area of the Facility (refer to Photographs 8 through 10). According to the DEC, this issue was noted by the DEC in his report for the quarterly inspection conducted August 28, 2013, but corrective action had not been performed. It appeared that stormwater runoff from this location would flow offsite to the east.
9. The Facility site map included in the SWPPP/SPCC did not depict the location of the discharge pipe and outfall from the riser structure for the bioretention basin in the southeastern portion of the Facility (refer to Photograph 11).
10. Evidence of vehicle tracking and transport of sediment to the adjacent impervious surface was observed at the entry to the outdoor stockpile area in the southern portion of the Facility (refer to Photographs 12 through 14). Table 6 of the Facility SWPPP/SPCC did not identify a stabilized construction entrance or other BMP to prevent the transport of sediment due to vehicle tracking from the stockpile area.
11. The salt brine storage tanks located in the northeastern portion of the Facility (Area No. 8 on the Facility site map) were not located within secondary containment (refer to Photographs 15 and 16). The Facility site map depicts that stormwater runoff from this area would flow overland and offsite to the east.

Immediately following the Dayton Maintenance Facility site visit, the EPA Inspection Team conducted a site visit at the Pine Orchard Satellite Facility (hereinafter, Satellite Facility). MDSHA staff explained the Satellite Facility is operated and maintained by MDSHA Dayton Maintenance Facility personnel. The Satellite Facility is located at 10307 Baltimore National Pike, Ellicott City, MD. The Satellite Facility is

Site Visit Report	MDSHA MS4 (General Permit No. 99-DP-3313) Dayton Maintenance Facility & Pine Orchard Satellite Facility MDSHA District No. 7	Site Visit Date: 11/20/2013
--------------------------	---	--------------------------------

typically not staffed and is comprised of an office building/trailer, a fuel tank and dispenser, a magnesium chloride storage tank, salt brine storage tank, and a salt storage dome.

The EPA Inspection Team observed the following with regard to pollution prevention and good housekeeping at the Pine Orchard Satellite Facility:

12. A combined SWPPP/SPCC for the Satellite Facility, dated July 2010, was made available to the EPA Inspection Team for review. The Satellite Facility SWPPP/SPCC included a site map of the Satellite Facility.
13. MDSHA staff explained that the Facility Tech Manager conducts inspections of the Satellite Facility monthly and the DEC conducts inspections semi-annually.
14. The salt brine and magnesium chloride storage tanks at the Satellite Facility were not located within secondary containment (refer to Photographs 17 and 18).
15. The magnesium chloride tank was not identified on the Satellite Facility site map included in the Satellite Facility SWPPP/SPCC. MDSHA staff stated that the tank had been installed at the Satellite Facility about a year prior to the EPA Inspection Team's site visit but had not been added to the site map.
16. Staining was present on the impervious ground surface to the west of the salt storage dome and underneath a front loader stored at the Satellite Facility (refer to Photographs 19 and 20).

Site Photographs	MDSHA MS4 (General Permit No. 99-DP-3313) Dayton Maintenance Facility & Pine Orchard Satellite Facility MDSHA District No. 7	Site Visit Date: 11/20/2013
-------------------------	---	--------------------------------

Dayton Maintenance Facility Photographs



Photograph 1. View of the bioretention basin in the northeastern portion of the Facility.



Photograph 2. View of the bioretention basin in the southeastern portion of the Facility.

Site Photographs	MDSHA MS4 (General Permit No. 99-DP-3313) Dayton Maintenance Facility & Pine Orchard Satellite Facility MDSHA District No. 7	Site Visit Date: 11/20/2013
-------------------------	---	--------------------------------



Photograph 3. View of the indoor vehicle wash bay. Note that the floor drain is connected to an oil/water separator which discharges to an underground 500-gallon holding tank.



Photograph 4. View of the Facility's salt storage dome. Note that white salt residue was present on the impervious ground surface adjacent to the structure.

Site Photographs

MDSHA MS4 (General Permit No. 99-DP-3313)
**Dayton Maintenance Facility &
Pine Orchard Satellite Facility**
MDSHA District No. 7

Site Visit Date:
11/20/2013



Photograph 5. View of white salt residue on the ground surface adjacent to the salt storage dome.



Photograph 6. Close-up view of salt and white salt residue on the ground surface adjacent to the salt storage dome.

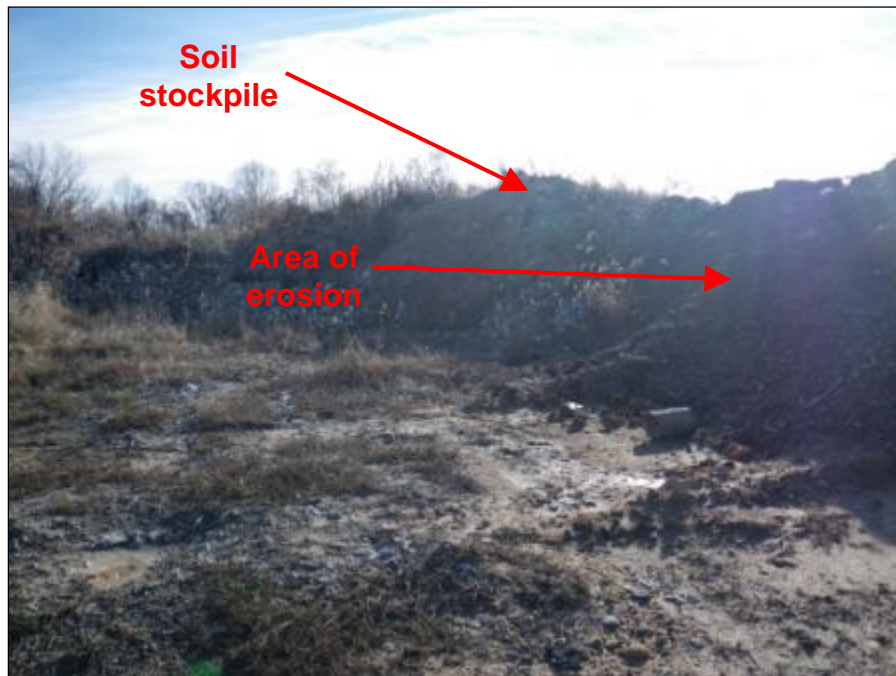
Site Photographs

MDSHA MS4 (General Permit No. 99-DP-3313)
**Dayton Maintenance Facility &
Pine Orchard Satellite Facility**
MDSHA District No. 7

Site Visit Date:
11/20/2013



Photograph 7. View of metal materials stored outside on an impervious ground surface upgradient of the bioretention basin in the northeastern portion of the Facility.



Photograph 8. View of soil stockpile in the northeastern portion of the outdoor stockpile area of the Facility. Note area of erosion on slope of the soil stockpile.

Site Photographs	MDSHA MS4 (General Permit No. 99-DP-3313) Dayton Maintenance Facility & Pine Orchard Satellite Facility MDSHA District No. 7	Site Visit Date: 11/20/2013
-------------------------	---	--------------------------------



Photograph 9. Close-up view of area of erosion on the soil stockpile shown in previous photograph.

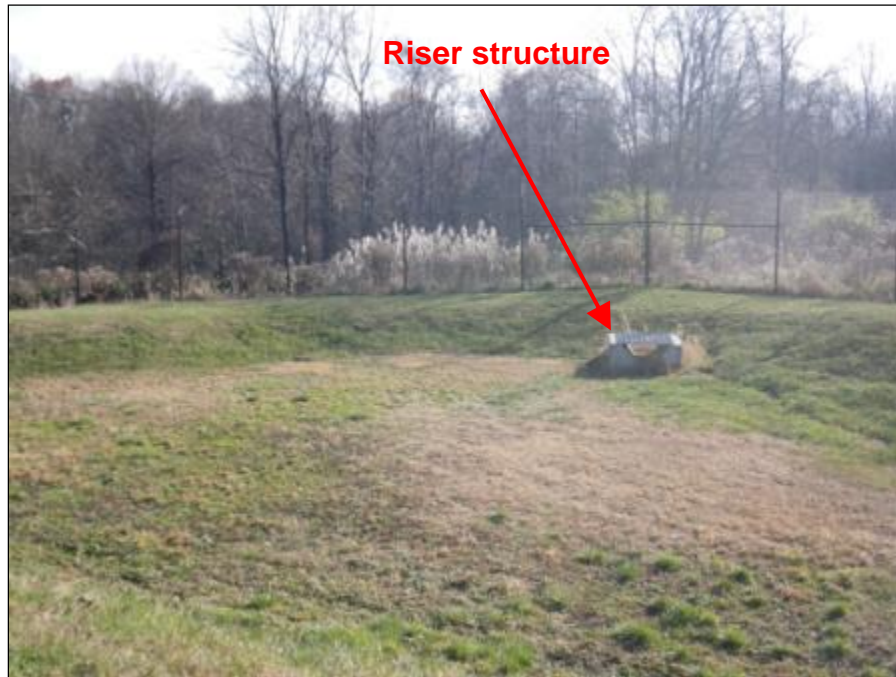


Photograph 10. View of sediment downgradient of eroded soil stockpile shown in previous photographs. Sediment which appeared to have been transported from the stockpile was present in a drainage pathway that leads to the east. Soil stockpile is just out of the photograph frame to the right.

Site Photographs

MDSHA MS4 (General Permit No. 99-DP-3313)
**Dayton Maintenance Facility &
Pine Orchard Satellite Facility**
MDSHA District No. 7

Site Visit Date:
11/20/2013



Photograph 11. View of the outfall riser structure for the bioretention basin in the southeastern portion of the Facility. Note that the Facility site map included in the SWPPP/SPCC did not depict the location of the discharge pipe and outfall downgradient of the riser structure.



Photograph 12. View of sediment on impervious surface adjacent to entrance to the outdoor stockpile area in the southern portion of the Facility.

Site Photographs

MDSHA MS4 (General Permit No. 99-DP-3313)
**Dayton Maintenance Facility &
Pine Orchard Satellite Facility**
MDSHA District No. 7

Site Visit Date:
11/20/2013



Photograph 13. Additional view of evidence of vehicle tracking at entrance to outdoor stockpile area.



Photograph 14. View facing southeast into the outdoor stockpile area from the entrance. Note that the ground surface at the entrance was unstabilized.

Site Photographs

MDSHA MS4 (General Permit No. 99-DP-3313)
**Dayton Maintenance Facility &
Pine Orchard Satellite Facility**
MDSHA District No. 7

Site Visit Date:
11/20/2013



Photograph 15. View of the salt brine storage tanks located in the northeastern portion of the Facility. Note that the tanks were not located within secondary containment.



Photograph 16. Additional view of the salt brine storage tanks shown in previous photograph.

Site Photographs	MDSHA MS4 (General Permit No. 99-DP-3313) Dayton Maintenance Facility & Pine Orchard Satellite Facility MDSHA District No. 7	Site Visit Date: 11/20/2013
-------------------------	---	--------------------------------

Pine Orchard Satellite Facility Photographs



Photograph 17. View of salt brine and magnesium chloride storage tanks at the Satellite Facility. Note that the tanks were not located within secondary containment.



Photograph 18. Closer view of the salt brine storage tank shown in previous photograph.

Site Photographs

MDSHA MS4 (General Permit No. 99-DP-3313)
**Dayton Maintenance Facility &
Pine Orchard Satellite Facility**
MDSHA District No. 7

Site Visit Date:
11/20/2013



Photograph 19. View of staining on the impervious ground surface on the west side of the salt storage dome.



Photograph 20. Close-up view of staining under the front loader shown in previous photograph.

Sign-in Sheet

MDSHA MS4 (General Permit No. 99-DP-3313)
**Dayton Maintenance Facility &
 Pine Orchard Satellite Facility**
 MDSHA District No. 7

Site Visit Date:
 11/20/2013

INSPECTION SIGN-IN SHEET (PLEASE PRINT)

Name of Facility: SHA Dayton Maintenance Facility

Date Conducted: 11 / 20 / 2013

Name	Title	Entity	Phone
Rebecca K Crane	EPA NPDES Enforcement Officer	US EPA Region 3	215-814-2389
Eddie Faul	ECD	SHA ECD	443-677-3988
Greg Keenan	Chief SHA - ECD	SHA - ECD	(410) 582-5585
Wayne Rippey	THESC	SHA DAYTON	410-531-5533
Carlton Wyll	FMS I	SHA Dayton	410-531-5533
Tim Stambaugh	ARME	SHA Dayton	410-531-5533
Jim Jones	RME	SHA DAYTON	410-531-5533
Kathryn Bendak	NPDES Permits Branch EPA Compliance Officer	EPA Region 3	215-814-2709
Andy Dismore	NPDES ENFORCEMENT STORMWATER TEAM LEADER	EPA R3	215-814-2788